

WHAT IS CLAIMED IS:

1. A wash water-circulating apparatus for washing machines, comprising:

5 a circulation channel connected between one side of a tub and the other side of the tub for allowing wash water to circulate therethrough;

a pump assembly disposed on the circulation channel for forcibly circulating the wash water; and

10 a water level sensor disposed at the pump assembly or on the circulation channel downstream of the pump assembly for measuring the water pressure of the wash water discharged from the pump assembly.

15 2. The apparatus as set forth in claim 1, further comprising a heater assembly disposed on the circulation channel downstream of the pump assembly for heating the circulated wash water.

20 3. The apparatus as set forth in claim 2, wherein the water level sensor is mounted on the circulation channel between the pump assembly and the heater assembly.

25 4. The apparatus as set forth in claim 2, wherein the water level sensor is disposed at the heater assembly.

5. The apparatus as set forth in claim 2, wherein the water level sensor is disposed on the circulation channel downstream of the heater assembly.

5 6. The apparatus as set forth in claim 1, further comprising a drainage channel connected to the pump assembly for discharging the wash water in the tub to the outside, wherein the wash water is selectively pumped to the circulation channel or to the drainage channel by means of the
10 pump assembly.

7. The apparatus as set forth in claim 1, wherein the circulation channel has a wash water-spraying end disposed at the lower part of the tub so that the wash water is sprayed
15 into the tub through the wash water-spraying end.

8. The apparatus as set forth in claim 1, wherein the circulation channel has a wash water-spraying end disposed at the upper part of the tub so that the wash water is sprayed
20 into the tub through the wash water-spraying end.

9. A method of controlling wash water circulation for washing machines, comprising the steps of:

re-circulating wash water supplied into a tub along a
25 circulation channel by operating a pump; and

measuring the discharging pressure of the pump while the wash water is re-circulated, and further supplying water into the tub if the discharging pressure of the pump is less than a prescribed pressure.

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10. The method as set forth in claim 9, wherein the pump is stopped for a prescribed period of time when the water is further supplied into the tub.

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11. The method as set forth in claim 9, wherein the pump is periodically stopped/operated when the water is further supplied into the tub.

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12. The method as set forth in claim 11, wherein the pump-stopping time is shorter than the pump-operating time.

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13. The method as set forth in claim 9, further comprising the steps of measuring the discharging pressure of the pump after the water is further supplied, and stopping supply of water if the discharging pressure of the pump is not less than a prescribed pressure.

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14. The method as set forth in claim 13, wherein the pump is stopped for a prescribed period of time when the water is further supplied into the tub.

15. The method as set forth in claim 13, wherein the pump is periodically stopped/operated when the water is further supplied into the tub.

5 16. The method as set forth in claim 15, wherein the pump-stopping time is shorter than the pump-operating time.

17. A washing machine comprising:

a tub for storing wash water;

10 a circulation channel connected between one side of the tub and the other side of the tub for allowing the wash water to circulate into the tub therethrough so that the wash water is sprayed into the tub;

15 a pump assembly disposed on the circulation channel for forcibly circulating the wash water;

a water level sensor for measuring the water pressure of the wash water discharged from the pump assembly; and

20 control means for controlling supply of the wash water into the tub and operation of the pump assembly on the basis of the signal from the water level sensor.

25 18. The machine as set forth in claim 17, further comprising a drainage channel connected to the pump assembly for discharging the wash water in the tub to the outside, wherein the wash water is selectively pumped to the

circulation channel or to the drainage channel by means of the pump assembly.

19. The machine as set forth in claim 17, wherein the
5 machine is a drum washing machine with the tub disposed
approximately horizontally.

20. The machine as set forth in claim 17, wherein the
machine is an upright washing machine with the tub disposed
10 approximately vertically.